Scenario: #1 - Removal and Disposal of Brush and Trees < 6 inch Diameter

## **Scenario Description:**

Remove and disposal of brush and trees < 6 inches in diameter by demolition, excavation or other means required for removal. Dispose of all brush and trees so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all brush and trees by removal to an approved landfill, wood chipping and or land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of brush and trees in order to apply conservation practices or facilitate the planned land use. Brush and tree removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Associated Practices: Animal Mortality Facility (316), Composting Facility (317), Contour Farming (330), Diversion (362), Early Successional Habitat Development and Management (647), Grass Waterway (412), Heavy Use Area Protection (561), Livestock Pipeline (516), Stripcropping (585), Subsurface Drainage (606), Terrace (600), Underground Outlet (620), Upland Wildlife Habitat Management (645), Waste Storage Facility (313).

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure including habitat fragmentation for grassland dependent birds. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

#### **After Situation:**

The typical area will be a 2.0 acre impaired area. The removal of brush and trees < 6 inch diameter will be performed with the use of equipment and hand labor. Dispose of all brush and trees from the obstruction removal so that it does not impede subsequent work or cause onsite or offsite damage. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to NRCS Conservation Practice Standard 342, Critical Area Planting for seedbed preparation, seeding, fertilizing, and mulching requirements. The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape.

Scenario Feature Measure: Land Area

Scenario Unit: Acre

Scenario Typical Size: 2

Scenario Cost: \$2,425.19 Scenario Cost/Unit: \$1,212.60

Cost Details (by categor	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Dozer, 140 HP	927	Track mounted Dozer with horsepower range of 125 to 160. Equipment and power unit costs. Labor not included.	Hour	\$126.14	8	\$1,009.12
Brush Chipper, 6" capacity	938	Brush Chipper, 6" capacity, typically 35 HP. Includes chipper and power unit. Labor not included.	Hour	\$22.42	8	\$179.36
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.72	8	\$301.76
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$22.43	8	\$179.44
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc.	Hour	\$39.79	8	\$318.32
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	8	\$177.76
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$259.43	1	\$259.43

Scenario: #2 - Removal and Disposal of Brush and Trees > 6 inch Diameter

## **Scenario Description:**

Remove and disposal of brush and trees > 6 inches in diameter by demolition, excavation or other means required for removal. Dispose of all brush and trees so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all brush and trees by removal to an approved landfill, wood chipping and or land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of brush and trees in order to apply conservation practices or facilitate the planned land use. Brush and tree removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Associated Practices: Animal Mortality Facility (316), Composting Facility (317), Contour Farming (330), Diversion (362), Early Successional Habitat Development and Management (647), Grass Waterway (412), Heavy Use Area Protection (561), Livestock Pipeline (516), Stripcropping (585), Subsurface Drainage (606), Terrace (600), Underground Outlet (620), Upland Wildlife Habitat Management (645), Waste Storage Facility (313).

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure including habitat fragmentation for grassland dependent birds. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

## **After Situation:**

The typical area will be a 2.0 acre impaired area. The removal of brush and trees > 6 inch diameter will be performed with the use of equipment and hand labor. Dispose of all brush and trees from the obstruction removal so that it does not impede subsequent work or cause onsite or offsite damage. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to NRCS Conservation Practice Standard 342, Critical Area Planting for seedbed preparation, seeding, fertilizing, and mulching requirements. The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape.

Scenario Feature Measure: Land Area

Scenario Unit: Acre

Scenario Typical Size: 2

Scenario Cost: \$4,712.16 Scenario Cost/Unit: \$2,356.08

Cost Details (by category		Price				
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Brush Chipper, 15" capacity	1868	Brush Chipper, 15" capacity, typically 165 HP. Includes chipper and power unit. Does not include labor.	Hour	\$66.41	12	\$796.92
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.72	12	\$452.64
Dozer, 200 HP	928	Track mounted Dozer with horsepower range of 160 to 250. Equipment and power unit costs. Labor not included.	Hour	\$189.16	12	\$2,269.92
Labor						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$39.79	12	\$477.48
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	12	\$266.64
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$37.38	12	\$448.56

Scenario: #3 - Brush and Tree Removal with Hand Tools

## **Scenario Description:**

Cut brush and trees using hand tools such as a chainsaw. Remove brush and trees using a pick-up truck, chipper or other means required for removal. Dispose of all brush and trees so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all brush and trees by removal to an approved landfill, wood chipping and or land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of brush and trees in order to apply conservation practices or facilitate the planned land use. Brush and tree removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment.

Associated Practices: Animal Mortality Facility (316), Composting Facility (317), Contour Farming (330), Diversion (362), Early Successional Habitat Development and Management (647), Grass Waterway (412), Heavy Use Area Protection (561), Livestock Pipeline (516), Stripcropping (585), Subsurface Drainage (606), Terrace (600), Underground Outlet (620), Upland Wildlife Habitat Management (645), Waste Storage Facility (313).

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure including habitat fragmentation for grassland dependent birds. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

#### **After Situation:**

The typical area will be a 1.0 acre impaired area. The cutting of brush and trees was performed using hand tools and manual labor. Removal of brush and trees occured using a pick-up truck, chipper or other method. Dispose of all brush and trees from the obstruction removal so that it does not impede subsequent work or cause onsite or offsite damage. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to NRCS Conservation Practice Standard 342, Critical Area Planting for seedbed preparation, seeding, fertilizing, and mulching requirements. The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape.

Scenario Feature Measure: Land Area

Scenario Unit: Acre

Scenario Typical Size: 1

Scenario Cost: \$1,035.18 Scenario Cost/Unit: \$1,035.18

Cost Details (by categor	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Brush Chipper, 15" capacity	186	Brush Chipper, 15" capacity, typically 165 HP. Includes chipper and power unit. Does not include labor.	Hour	\$66.41	6	\$398.46
Chainsaw	93	Equipment and power unit costs. Labor not included.	Hour	\$6.39	6	\$38.34
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.72	6	\$226.32
Labor						
Skilled Labor	230	DLabor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$39.79	6	\$238.74
General Labor	23	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	6	\$133.32

Scenario: #4 - Removal and Disposal of Fence

## **Scenario Description:**

Remove and disposal of all existing fences by demolition, excavation or other means required for removal. Dispose of all fence materials from the site so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all materials by removal to an approved landfill, wood chipping and land distribution, or recycling center, burial at an approved location or burning. If burning is used, implement appropriate smoke management to protect public health and safety. Remove and dispose of the unwanted fence obstruction in order to apply conservation practices such as Upland Wildlife Habitat Management (645) or facilitate the planned land use. Fence removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and enjoyment and reduce hazards to wildlife.

Associated Practices: Animal Mortality Facility (316), Composting Facility (317), Contour Farming (330), Diversion (362), Grass Waterway (412), Heavy Use Area Protection (561), Livestock Pipeline (516), Stripcropping (585), Subsurface Drainage (606), Terrace (600), Underground Outlet (620), Waste Storage Facility (313).

### **Before Situation:**

On any land where existing fence interferes with planned land use development, public safety, wildlife movement and habitat, or infrastructure. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

#### **After Situation:**

The typical fence will be 2640 in linear feet. The removal of the fence will be performed with the use of equipment and hand labor. Dispose of all debris from the fence removal so that it does not impede subsequent work or cause onsite or offsite damage. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to NRCS Conservation Practice Standard 342, Critical Area Planting for seedbed preparation, seeding, fertilizing, and mulching requirements. The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape such as Upland Wildlife Habitat Management (645).

Scenario Feature Measure: Length of Fence

Scenario Unit: Linear Feet Scenario Typical Size: 2,640

Scenario Cost: \$2,782.63 Scenario Cost/Unit: \$1.05

Cost Details (by category	·):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Skidsteer, 80 HP	933	Skidsteer loader with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$43.79	20	\$875.80
Truck, Pickup	939	Equipment and power unit costs. Labor not included.	Hour	\$37.72	20	\$754.40
Labor						
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$22.43	20	\$448.60
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	20	\$444.40
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$259.43	1	\$259.43

Practice: 500 - Obstruction Removal Scenario: #5 - Rock blasting and disposal

## **Scenario Description:**

Remove and disposal of rock and or boulders by drilling and blasting for removal. Dispose of all rocks and or boulders so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all rock and or boulders by removal to an approved location, or reuse location. Remove and dispose all rock and or boulders in order to apply conservation practices or facilitate the planned land use. Rocks and or boulders will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and integrity.

Associated practices: Waste Storage Facility(313), Grassed waterway (412), Terrace (600), Heavy Use Area Protection (561), Underground outlet (620), Pipeline (516)

# **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

### **After Situation:**

The typical area will be have rock extending to the surface or within the excavation limits of the practice to be installed. The removal of rock and or boulders will be performed by drilling and blasting required for removal with the use of heavy equipment and hand labor. Typically done on larger projects like waster storage facility where the location must be done in an area with rock formations. Rock is preblasted and removed during the excavatoni process. Material un suitable for fill is hauled away and buried or stockpiled for alternate uses. Dispose of all rocks and boulders from the obstruction removal so that it does not impede subsequent work or cause onsite or offsite damage. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to NRCS Conservation Practice Standard 342, Critical Area Planting for seedbed preparation, seeding, fertilizing, and mulching requirements. The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape.

Scenario Feature Measure: Volume

Scenario Unit: Cubic Yard Scenario Typical Size: 500

Scenario Cost: \$20,023.18 Scenario Cost/Unit: \$40.05

Cost Details (by category)				Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Drilling and Blasting Rock, Bulk	1395	Bulk drilling & blasting of rock or boulders not requiring blasting mats (typically a min. 100 CY). Includes all equipment, labor and supplies to complete the blast.	Cubic Yard	\$12.28	500	\$6,140.00
Truck, dump, 18 CY	1400	Dump truck for moving bulk material. Typically capacity is 25 ton or 18 cubic yards. Includes equipment only.	Hour	\$123.01	40	\$4,920.40
Track Loader, 95HP	935	Equipment and power unit costs. Labor not included.	Hour	\$89.84	48	\$4,312.32
Labor						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc	Hour	\$39.79	2	\$79.58
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	40	\$888.80
Equipment Operators, Light	232	Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$22.43	40	\$897.20
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$37.38	48	\$1,794.24
Mobilization						
Mobilization, large equipment	1140	Equipment >150HP or typical weights greater than 30,000 pounds or loads requiring over width or over length permits.	Each	\$495.32	2	\$990.64

Scenario: #6 - Rock, Mechanical Destruction

## **Scenario Description:**

Remove and disposal of rock and or boulders by mechanical destruction. Work typically done on projects like waste storage facility or pipelines where rock formations were not anticipated or small in quantity. Requires either a man held jack hammer or track hoe with a rock pecker to break up rock. Rock loaded and or boulders removed with equipment to an approved location, or reuse location. Additional work may include burial of unsuitable materials. This process allows appliction of conservation practices or facilitate the planned land use. Removal address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use and integrity.

Associated practices: Waste Storage Facility(313), Grassed waterway (412), Terrace (600), Heavy Use Area Protection (561), Underground outlet (620), Pipeline (516)

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

# **After Situation:**

The site had 50 CY rock extending above required bottom of excavation or within the excavation limits of the practice to be installed. The removal of rock and or boulders was performed by jack hammering with an equipment mouted rock pecker. Material then removed with heavy equipment and hauled away. Material un suitable for fill is hauled away and buried or stockpiled for alternate uses. Revegetate or otherwise protect from erosion disturbed areas as soon as possible. Refer to . The practice is to improve site conditions in order to apply conservation practices or facilitate better use of the landscape.

Scenario Feature Measure: Volume of rock removed

Scenario Unit: Cubic Yard Scenario Typical Size: 50

Scenario Cost: \$2,266.56 Scenario Cost/Unit: \$45.33

Cost Details (by category	):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Hydraulic Excavator, 1 CY	931	Track mounted hydraulic excavator with bucket capacity range of 0.8 to 1.5 CY. Equipment and power unit costs. Labor not included.	Hour	\$115.72	6	\$694.32
Auger, Post driver attachment	934	Auger or post driver attachment to a tractor or skidsteer.  Does not include power unit. Labor not included.	Hour	\$8.48	6	\$50.88
Truck, dump, 12 CY	1215	Dump truck for moving bulk material. Typically capacity is 16 ton or 12 cubic yards. Includes equipment only.	Hour	\$98.25	2	\$196.50
Track Loader, 95HP	935	Equipment and power unit costs. Labor not included.	Hour	\$89.84	2	\$179.68
Labor				·		
Equipment Operators, Heavy	233	Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$37.38	12	\$448.56
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$22.22	8	\$177.76
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$259.43	2	\$518.86

Scenario: #7 - Removal and Disposal of Steel and or Concrete Structures

### **Scenario Description:**

Remove and disposal of steel and or concrete structures by demolition, excavation or other means required for removal. Dispose of all steel and or concrete structures so that it does not impede subsequent work or cause onsite or offsite damage. Dispose of all steel and or concrete structures by removal to an approved location, or reuse location. Remove and dispose all steel and or concrete structures in order to apply conservation practices or facilitate the planned land use. Steel and or concrete structure removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use.

Associated Practices: Waste StorageFacility (313), Heavy use area protection (561), Undergrount outlet (620), Struture for water Control (587), Roof Runoff Structure (558), and Critical Area Planting (342)

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

## **After Situation:**

2000 square feet of exiting concrete that isremoved to install and undergound outlet for a Roof Gutter system and establish proper grade for a new Heavy use area. Part of the removal includes 30 feet of 3' high concrete retaining wall. The removal of steel and or concrete structures was performed by demolition and excavation with the use of heavy equipment and hand labor. All steel and or concrete waste from the obstruction was removed so that it does not impede subsequent work or cause onsite or offsite damage.

Scenario Feature Measure: Land Area

Scenario Unit: Square Feet Scenario Typical Size: 2,000

Scenario Cost: \$9,781.41 Scenario Cost/Unit: \$4.89

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation Auger, Post driver attachment 934 Auger or post driver attachment to a tractor or skidsteer. Hour \$8.48 24 \$203.52 Does not include power unit. Labor not included. 24 Hydraulic Excavator, .5 CY 930 Track mounted hydraulic excavator with bucket capacity \$56.82 \$1,363.68 Hour range of 0.3 to 0.8 CY. Equipment and power unit costs. Labor not included. Track Loader, 95HP 935 Equipment and power unit costs. Labor not included. \$89.84 24 \$2,156.16 Hour \$123.01 24 \$2,952.24 Truck, dump, 18 CY 1400 Dump truck for moving bulk material. Typically capacity is Hour 25 ton or 18 cubic yards. Includes equipment only. Labor Equipment Operators, Heavy 233 Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Hour \$37.38 48 \$1,794.24 Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons. General Labor 231 Labor performed using basic tools such as power tool, \$22.22 24 \$533.28 Hour shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. Mobilization 1139 Equipment with 70-150 HP or typical weights between Each \$259.43 \$778.29 Mobilization, medium equipment 14,000 and 30,000 pounds.

Scenario: #8 - Removal and Disposal of Wood Structures

## **Scenario Description:**

Remove and disposal of wood structures by demolition, excavation or other means required for removal. Wood structure removal will address the resource concerns of the prevention or hindrance to the installation of conservation practices or present a hazard to their use. Dispose of all wood structures by removal to an approved location, landfill, or reuse location. Materials are sorted for salvage. Wood materials are ground up for mulch. This process allows implementation of additional conservation practices to address a resource concern in that immediate area.

Associated Practices: Animal Mortality Facility (316), Composting Facility (317), Contour Farming (330), Diversion (362), Grass Waterway (412), Heavy Use Area Protection (561), Livestock Pipeline (516), Stripcropping (585), Subsurface Drainage (606), Terrace (600), Underground Outlet (620), Waste Storage Facility (313).

### **Before Situation:**

On any land where existing obstructions interfere with planned land use development, public safety or infrastructure. The site may be abandoned mine lands, construction sites, recreation areas, farms, ranches, and areas affected by natural disasters. This is not intended for the removal of obstructions from aquatic environments.

# **After Situation:**

An existing 32,000 SF poultry facility is removed to allow remidiation of the old dirt floor. Materials are systematically removed and slavaged with none usable material consolidated and landfilled. Wood materials that are suitable are ground up for mulch and stockpiled for remediation work. Work includes hand labor, , grinding, heavy equipment and trucking. The removed facility now allows the existing dirtfloor to be remidiated under a seperate practice.

Scenario Feature Measure: Building footprint

Scenario Unit: Square Feet Scenario Typical Size: 32,000

Scenario Cost: \$27,122.15 Scenario Cost/Unit: \$0.85

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation 1404 TUB grinder-350 HP, 10'6" diameter tub opening, 8' \$256.94 Tub Grinder, 350 HP Hour 32 \$8,222.08 diameter inside base. Includes equipment cost only. 24 Truck, dump, 18 CY 1400 Dump truck for moving bulk material. Typically capacity is Hour \$123.01 \$2,952.24 25 ton or 18 cubic yards. Includes equipment only. Skidsteer, 80 HP 933 Skidsteer loader with horsepower range of 60 to 90. \$43.79 64 Hour \$2,802.56 Equipment and power unit costs. Labor not included. Hydraulic Excavator, .5 CY 930 Track mounted hydraulic excavator with bucket capacity Hour \$56.82 164 \$3,636.48 range of 0.3 to 0.8 CY. Equipment and power unit costs. Labor not included. Chainsaw 937 Equipment and power unit costs. Labor not included. Hour \$6.39 64 \$408.96 Labor \$22.43 88 \$1,973.84 Equipment Operators, Light 232 Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Hour Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers 128 General Labor 231 Labor performed using basic tools such as power tool, Hour \$22.22 \$2,844.16 shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. \$37.38 \$3,588.48 Equipment Operators, Heavy 233 Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Hour 96 Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons. Mobilization \$518.86 Mobilization, medium 1139 Equipment with 70-150 HP or typical weights between \$259.43 2 Each 14,000 and 30,000 pounds. equipment 1138 Equipment <70 HP but can't be transported by a pick-up 1 \$174.49 Mobilization, small equipment Each \$174.49 truck or with typical weights between 3,500 to 14,000